

Mr. Michael T. Davis Pre-Calculus	2.4 Unit Practice Quiz December 15, 2015
Name: <input type="text"/>	

For #'s 1-9, solve each equation for all solutions (rational, irrational & imaginary)

1. Solve $x^2 + 49 = 0$

2. Solve $2y^2 - 64 = 0$

3. Solve $p^2 - 4p + 2 = 0$

4. Solve $w^2 + 6w + 10 = 0$

5. Solve $3t^3 + 36t = 0$

6. Solve $10y^3 + 20y^2 + 5y = 0$

7. Solve $x^3 - 2x^2 - 20x + 40 = 0$

8. Solve $p^4 - 5p^2 - 36 = 0$

9. Write an equation in standard form for the degree 2 polynomial function with the given solution set $\{2i, -2i\}$

10. Write an equation in standard form for the degree 2 polynomial function with the given solution set $\{\sqrt{13}, -\sqrt{13}\}$

11. The solution set is $\{1, i\sqrt{6}, -i\sqrt{6}\}$, and the polynomial has degree 3

Optional Extra Credit

Solve $2x^3 - 8x^2 + 5x + 3 = 0$ for all three solutions given that $x - 3$ is one factor of the polynomial.